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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)Rec'd PCT/PTO 18 JAN 2005

Applicant's or agent's file reference WO 38163	FOD FIDTUFD A CTION DOO NOTHICARDIN OF HARMANIA OF IRECTIONAL						
International application No.	· ·	ing date (day/month/year) Priority date (day/month/year)					
PCT/EP2003/007725	16 July 2003 (10	6.07.2003)	17 July 2002 (17.07.2002)				
International Patent Classification (IPC) or na H01M 4/60	ational classification and II	PC					
Applicant GAL	A AKKUMULATOR	ENWERKE GN	ивн				
This international preliminary examinand is transmitted to the applicant acts. This REPORT consists of a total of	ccording to Article 36.		ational Preliminary Examining Authority				
This report is also accompani	ied by ANNEXES, i.e., she r this report and/or sheets o	eets of the description	on, claims and/or drawings which have been tions made before this Authority (see Rule				
These annexes consist of a to	tal of 11 she	eets.					
3. This report contains indications rela	ting to the following items	:					
I Basis of the report							
II Priority	II Priority						
III Non-establishment o	of opinion with regard to n	ovelty, inventive st	ep and industrial applicability				
IV Lack of unity of inv	ention						
Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
VI Certain documents	VI Certain documents cited						
VII Certain defects in th	ne international application	1					
VIII Certain observations on the international application							
Date of submission of the demand		Date of completion	of this report				
16 February 2004 (16.0)	2.2004)	07	July 2004 (07.07.2004)				
Name and mailing address of the IPEA/EP		Authorized officer					
Facsimile No.	l n	Telephone No.					



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/007725

I. Basis of the report							
1. With	regard to the elements of the international application:*						
	the international application as originally filed						
	the description:						
	•	, as originally filed					
		iled with the demand					
		04 (28.06.2004)					
	the claims:						
İ		_, as originally filed					
1	pages , as amended (together with any statem	iled with the demand					
		04 (28.06.2004)					
	, med with the letter of 25 Julie 200	04 (28.00.2004)					
	the drawings:						
	pages	_ , as originally filed					
	pages, i	filed with the demand					
	pages, filed with the letter of						
	the sequence listing part of the description:						
	pages	_ , as originally filed					
	pages						
	pages, filed with the letter of						
the in These states and the instance of the in	regard to the language, all the elements marked above were available or furnished to this Authority in international application was filed, unless otherwise indicated under this item. The elements were available or furnished to this Authority in the following language the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). The language of publication of the international application (under Rule 48.3(b)). The language of the translation furnished for the purposes of international preliminary examination (or 55.3). The regard to any nucleotide and/or amino acid sequence disclosed in the international application invaries of the sequence listing: contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond to international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written been furnished.	which is: funder Rule 55.2 and/ ion, the international					
in t	The amendments have resulted in the cancellation of: the description, pages the claims, Nos the drawings, sheets/fig This report has been established as if (some of) the amendments had not been made, since they have beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** lacement sheets which have been furnished to the receiving Office in response to an invitation under Arthis report as "originally filed" and are not annexed to this report since they do not contain ame	ticle 14 are referred to					
and	70.17). replacement sheet containing such amendments must be referred to under item I and annexed to this rep						

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Internat pplication No.
PCT/EP 03/07725

.,	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applications	ability;
٠.	citations and explanations supporting such statement	

ı. Ş	Statement			
	Novelty (N)	Claims	1-32	YES
novely (c)	Claims		NO NO	
Inventive step (IS)	Claims	1-32	YES	
	Claims		NO	
Industrial applicability (IA)	Claims	1-32	YES	
	Claims		NO	

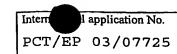
Citations and explanations

1. Reference is made to the following documents (see in principle the documents and passages cited in the search report):

D1: US-A-5824120 D2: EP-A-0774472

- 2. The present application meets the requirements of PCT Article 33(1) to (3). The subject matter of the claims is novel (PCT Article 33(2)) and involves an inventive step (PCT Article 33(3)).
- 3. Document D1 is considered the closest prior art. D1 discloses a bonding agent from which the subject matter of claim 1 differs merely in that the dispersion does not contain an amine or ammonium salt of a perfluorocarboxylic acid. The dispersion can be aqueous, as in the present application. The bonding agent as per D1 is employed to produce electrodes which are used in secondary batteries. The compositions of cathodes and anodes, the electrically conductive material, and the structure of the electrodes and/or the secondary batteries are standard measures. The subject matter of independent

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claims 1, 18, 29 and 31 is therefore novel over D1.

D2 discloses the preparation of aqueous fluoropolymer dispersions. Perfluorated emulsifiers are added to these dispersions. The presence of an electrically conductive material is not mentioned. Amine and ammonium salts as per claim 1 of the application are preferred. D2 does not describe a bonding agent. The subject matter of claim 1 is also novel over D2. The fluoropolymer dispersions of D2 are not used to produce electrodes or batteries.

4. The problem addressed by the application is that of improving the bonding of the electrode material to the aroma collectors so as to avoid clear malfunctions from arising during the battery charging/discharging process after only a few cycles (application: page 3, lines 8-21).

This problem is solved by the addition of an amine or ammonium salt. This solution cannot be derived from D1. A person skilled in the art would not take into consideration the teaching of D2 for solving the problem addressed by the application since said document relates to the provision of fluororubbers (page 2, lines 34-35) and contains no suggestion as to the use of amine or ammonium salts for producing bonding agents. An inventive step can therefore be acknowledged for the subject matter of independent claims 1, 18, 29 and 31.

In substantiating inventive step, it does not appear appropriate to carry out a direct comparison of the results of example 1 and those of the comparative example 1 because these examples use different

polymers and therefore the compositions of the bonding agents that are to be compared differ from one another not only in the removal of the amine or ammonium salt.